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SIDOROV, F.F.; ZGIRSKIY, Ch.I.; ANAKIN, I.A.; YERAKHTIN, D.D., kandidat
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BUSHUYEV, N.M., kandidat tekhnicheskikh nauk, redaktor; SHABASHOV, A.P.,
kandidat tekhnicheskikh nauk, redaktor.

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SHABASHOV, A. P.

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So: Knizhnaya Letopis', Vol. 1 1955

57
PARNITSKIY, Adol'f Bronislavovich; SHABASHOV, Aleksandr Pavlovich;
KAZAK, S.A., kandidat tekhnicheskikh nauk, redaktor; KONYUKHOV,
S.M., dotsnet, redaktor; SOKOLOVSKIY, I.B., professor, doktor
tekhnicheskikh nauk, retsenzent; KARAPET'YAN, G.B., inzhener,
retsenzent; DUGINA, N.A., tekhnicheskii redaktor

[General purpose travelling crane; construction, design, operation]
Mostovye krany obshchego naznachenii; konstruktsiia, raschet,
ekspluatatsiia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi
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(Cranes, derricks, etc.)

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Matveyevich; YASENEV, Dmitriy Andreyevich; SATOVSKIY, Boris
Ivanovich; KUBACHEK, Vladimir Rudol'fovich; SHABASHOV, A.P.,
kand.tekhn.nauk, red.; DUGINA, N.A., tekhn.red.

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(Excavating machinery) (MIRA 11:12)

SHABASHOV, A. P.

14(2)

PHASE I BOOK EXPLOITATION SOV/2363

Parnitskiy, Adol'f Bronislavovich, and Aleksandr Pavlovich
Shabashov

Mostovyye krany obshchego naznacheniya; konstruktsiya, raschet, ekspluatatsiya (General-purpose Bridge Cranes; Construction, Design, and Operation) 2nd ed., rev. and enl. Moscow, Mashgiz, 1958. 403 p. Errata slip inserted. 14,000 copies printed.

Tech. Ed.: N.A. Dugina; Executive Ed.: T.M. Somova, Engineer
(Ural-Siberian Division, Mashgiz).

PURPOSE: This book is intended for engineering and technical personnel dealing with the design and operation of bridge cranes. It may also be used as a textbook for students of vtuzes and tekhnikums.

COVERAGE: The book deals with the development of leading Soviet crane-building plants in research, design, and construction of electrical double-girder, general-purpose bridge cranes. Also treated is experience gained by Soviet metallurgical and machinery-manufacturing plants in the operation of this type

Card 1/10

General-purpose Bridge Cranes (Cont.)

SOV/2363

of crane. The book contains drawings and technical specifications of crane designs, design formulas, design examples, and basic dimensions of the principal parts and subassemblies of cranes. Brief information on operation, maintenance, and repair of cranes is presented. In preparing the book the authors made use of materials of VNIPTMASH, Uralmashzavod (Ural Heavy Machinery Plant), "Sibtyazhmash" (Siberian Heavy Machinery Plant), and Novo-Kramatorskiy zavod (New Metallurgical Plant at Kramatorsk). The book conforms to current specifications of the Gosgortekhnadzor Rules for Construction and Safe Operation of Cranes. Chapters 2,6,7,8,9,14,15,16,17,18, 20, and 23 were written by A.B. Parnitskiy, Candidate of Technical Sciences, and the remainder by A.P. Shabashov, Candidate of Technical Sciences. The authors thank Engineer A.B. Vernik; Professor P.Z. Petukhov, Doctor of Technical Sciences; Engineers G.P. Ivanenko and V.I. Grinevich; and personnel of the Department of Hoisting and Transporting Machinery, Ural'skiy politekhnicheskii institut imeni S.M. Kirova (Ural Polytechnical Institute imeni S.M. Kirov). There are 66 references, all Soviet.

Card 2/10

General-purpose Bridge Cranes (Cont.)

SOV/2363

TABLE OF CONTENTS:

Foreword	3
Ch. I. General Information on Bridge Cranes	5
Constructions of bridge cranes	5
Parameters for bridge cranes	7
Ch. II. Design Loads, Materials, and Allowable Stresses for Parts of Crane Mechanisms	10
Design methods	10
Design loads	10
Materials	15
Allowable stresses	16
Safety factors	26
Ch. III. Pulley Blocks	29
Types of pulley blocks	29
Steel wire ropes	32
Sheaves	40

Card 3/10

General-purpose Bridge Cranes (Cont.)

SOV/2363

Ch. IV. Load Hooks and Hook Suspensions

Constructions of Hooks

Designing hooks

Hook suspensions

43

43

48

53

Ch. V. Rope Drums

Constructions of drums

Mounting of drums

Mounting of rope on drums

Drum design

59

59

60

65

68

Ch. VI. Gears and Reduction Gearing

Gears used in bridge cranes

Basic parameters of spur gears

Basic parameters of reduction gearing

Materials for bridge crane gears

Correction of gear-tooth profiles

Gear design

Reduction gearing

73

73

73

77

83

84

88

98

Card 4/10

General-purpose Bridge Cranes (Cont.)	SOV/2363
Ch. VII. Axles and Shafts	110
General information	110
Design of axles and shafts	112
Feather keys	119
Ch. VIII. Couplings	122
General information	122
Constructions of toothed couplings	122
Mounting of toothed couplings	128
Selecting toothed couplings	130
Sleeve-and pin-type couplings	130
Ch. IX. Rolling Contact Bearings	136
General information	136
Selection of bearings	136
Constructional and operational features of basic types of rolling contact bearings	137
Determining bearing dimensions	141
Mounting rolling contact bearings	146

Card 5/ 10

General-purpose Bridge Cranes (Cont.)

SOV/2363

Ch. X. Brakes and Electromagnets	156
Basic data	156
Determining braking moment	157
Brake constructions	161
Brief list of technical requirements for brake parts	181
Use of brakes	182
Brake design	183
Ch. XI. Running Wheels and Tracks	189
Constructions of running wheels	189
Designing running wheels	190
Mounting running wheels	193
Tracks	200
Ch. XII. Electric Crane Motors	203
General information	203
A-C motors	203
D-C motors	212
Selection and checking of electric motors	221
Brief information on electrical equipment for bridge cranes	238

Card 6/10

General-purpose Bridge Cranes (Cont.)	SOV/2363	
Ch. XIII. Constructions of Crane Trolleys		245
Ch. XIV. Constructions of Crane Bridges		254
Types of crane bridges		254
Closed-type bridges		258
Open-type bridges		264
Ch. XV. Basic Data for Designing Steel Structures of Crane Bridges		274
Methods of designing steel structures		274
Design loads (according to data of VNIPTMASH)		275
Recommended materials for manufacturing steel structures of crane bridges (according to data of VNIPTMASH)		278
Allowable stresses for steel structures of crane bridges (according to data of VNIPTMASH)		278
Allowable deflections in bridges and flexibility of truss elements		280
Camber of a bridge		280
Own weight of crane bridges		282
Fatigue strength of steel structures of crane bridges		285
Card 7/10		

General-purpose Bridge Cranes (Cont.)	SOV/2363
Ch. XVI. Designing Bridges With Box Beams	289
Design of main beams	289
Strength of the elements of main box beams	294
Checking the strength of top booms of auxiliary girders	297
Design of welded joints	299
Design of main girder diaphragms	299
Ch. XVII.. Designing Main Trusses	303
Static design	303
Structural design	304
Ch. XVIII. Bridge Traveling Mechanisms	311
Basic types of traveling mechanisms	311
Constructions of traveling mechanisms	316
Comparing the performance of traveling mechanisms with central and separate drives	322
Ch. XIX. Bumpers	326
Constructions of bumpers	326
Bumper design	331
Card 8/10	

General-purpose Bridge Cranes (Cont.)

SOV/2363

Principle of designing crane bumpers taking elastic load suspension into account	333
Ch. XX. Lubrication of Crane Mechanisms	336
Lubrication of gears and couplings	336
Lubrication of ball and roller bearings	338
Ch. XXI. Crane Operation	343
General considerations	343
Basic functions of the bridge crane operator	346
Rules for hoisting and transporting loads	347
Basic damage and malfunctions in the operation of bridge cranes	348
Ch. XXII. Brief Information on Crane Repair	356
System of planned preventive maintenance	356
Planning crane repair	357
Safety measures for crane repair	359
Accelerated repair of cranes	360

Card 9/10

General-purpose Bridge Cranes (Cont.)	SOV/2363
Crane repair with no down time	361
Replacing parts by the method of preassembled units in the repair of crane equipment	363
Ch. XXIII. Investigation of Crane Bridges	364
Theoretical data on stress distribution in box beams during bending	365
Experimental investigation of box beams	372
Conclusions	385
Appendixes	387
Bibliography	401
AVAILABLE: Library of Congress	G0/ec
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(Metal cutting)

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(Arbors and mandrels)
(Metalwork)

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(Machine tools—Vibration) (MIRA 11:8)

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(MIRA 13:2)

(Metal cutting)

PHASE I BOOK EXPLOITATION

SOV/4517

Kuklin, Leonid Grigor'yevich, Vasiliy Ivanovich Sagalov, Valeriy Borisovich Serebrovskiy, and Semen Pavlovich Shabashov, Candidate of Technical Sciences

Povysheniye prochnosti i iznosostoykosti tverdosplavnogo instrumenta (Increasing Strength and Wear Resistance of Carbide Tools) Moscow, Mashgiz, 1960. 182 p. 6,000 copies printed.

Ed.: Semen Pavlovich Shabashov, Candidate of Technical Sciences; Reviewer: F. A. Barbashov, Docent, Candidate of Technical Sciences; Managing Ed. (Ural-Siberian Department, Mashgiz): L. A. Kon'shina, Engineer; Tech. Ed.: N. A. Dugina.

PURPOSE: This book is intended for technical personnel at machine-building plants, scientific workers, and students at schools of higher technical education.

COVERAGE: The book is devoted to the problem of increasing the strength and wear resistance of carbide-tipped tools. The authors discuss the theoretical bases for brittle fracture and excessive wear of carbide-tipped tools occurring during

Card 1/7

Increasing Strength and Wear (Cont.)

SOV/4517

the fabrication and operation of tools. The results of experimental research in this area are examined. The book contains information on the properties of carbide tips at delivery, the brazing of tips, and the sharpening of tools. The authors analyze the internal stresses occurring in carbide-alloy tips during brazing and grinding, and make recommendations for improving brazing and grinding techniques. Also discussed are investigations for determining cutting capacity when cutting coarse chips under conditions of intermittent, non-uniform loading. Recommendations are made for the efficient use of carbide-tipped tools under such conditions. L. K. Zotova, A. S. Cherepanov, and students Cheng Hua-an, T'ien Ho-ch'un, and Cheng Kuai-k'uei participated in the investigations. There are 29 references: 28 Soviet, and 1 German.

TABLE OF CONTENTS:

Foreword	3
PART I. POWDERED METAL CARBIDE ALLOYS	
Ch. 1. General Information	5
Characteristics of carbide alloys	6
Card 2/7	

ZAGURSKIY, Vitaliy Ivanovich; RABOTIN, A.V., inzh., retsenzent;
SHABASHOV, S.P., kand.tekhn.nauk, red.; DUGINA, N.A.,
tekhn.red.

[Advanced methods for shaping screw threads] Progressivnye
sposoby obrabotki rez'by. Moskva, Gos.nauchno-tekhn.isd-vo
mashinostroit.lit-ry, 1960. 163 p. (MIRA 14:2)
(Screw cutting)

SHABASHOV, S.P., dotsent, kand.tekhn.nauk; POLUYATOVA, L.V., inzh.

Investigating the machinability of the S-15 alloy. Izv.vys.ucheb.
zav.; mashinostr. no.6:129-138 '60. (MIRA 13:7)

1. Ural'skiy politekhnicheskiy institut.
(Ferrosilicon--Testing)

LYAPTSEV, Vasilii Mikhaylovich, tokar'; SHABASHOV, S.P., kand.tekhn.
nauk, retsenzent; ANTSIFEROV, Yu.G., red.; DUGINA, N.A.,
tekhn. red.

[Advanced methods for machining on lathes] Peredovye metody
tokarnoi obrabotki. Moskva, Mashgiz, 1961. 20 p. (Biblioteka
rabochego-mashinostroitelia. Seriya: Peredovaya tekhnika -
osnova kommunisticheskogo truda, no.7) (MIRA 15:7)

1. Ural'skiy vagonostroitel'nyy zavod (for Lyaptsev).
(Turning)

SHABASHOV, S.P., dotsent, kand. tekhn. nauk; KUKLIN, L.G., dotsent, kand.
tekhn. nauk

Efficiency of new cooling techniques used in metal cutting.
Trudy Ural. politekh. inst. no.112:81-88 '61. (MIRA 16:7)

(Metal cutting--Cooling)

MEKHNOTSEV, Leonid Yakovlevich, tokar'; SHABASHOV, S.P., kand. tekhn. nauk, red.; DUGINA, N.A., tekhn. red.

[Advanced practice for all mechanics] Peredovoi opyt vsem tokariam. Moskva, Mashgiz, 1961. 62 p. (Biblioteka rabochego-mashinostroitel'ia. Seriya: Peredovaia tekhnika - osnova kommunisticheskogo truda, no.8) (MIRA 15:7)

1. Zavod "Uralelektroapparat" (for Mekhontsev).
(Machine-shop practice)

S/145/61/000/007/008/009
D221/D301

AUTHOR: Shabashov, S.P., Candidate of Technical Sciences, Docent
TITLE: Investigating the wear resistance of carbides in relation
to the oil-coolant
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye,
no. 7, 1961, 150-158

TEXT: Comparative tests in a special set-up simulating the wear of carbides on steel are described. The preliminary examination established that the wear does not depend on the duration and area of the contact when steel 48L (EI 481) was used. The specimens of carbides were cut out by electro-erosion from VK8 (VK8), T5K10 and TI5K6 plates. Coolants of different compositions were applied. The results with a 5% emulsion are tabulated and curves are plotted. They demonstrate that the wear resistance of carbides with and without coolant was contained within the bounds of their capacity. The wear intensity decreased with

Card 1/3

S/145/61/000/007/008/009
D221/D301

Investigating the wear ...

the use of coolant. It went down when working without a coolant at higher speeds. The tests with heat-resisting steel EI 481 without cooling revealed the phenomenon of adhesion, while the friction force depends on shear resistance of steel and carbide tip. The shear resistance of steel decreases at higher speeds and contact temperatures which results in lower wear. The shear strength of carbide increases somewhat with the temperature. Abundant cooling reduces the effect of seizure. The latter decreases also with greater speeds. On the other hand the microerosion due to thermal stresses increases with the speed. Consequently, the 5% emulsion produces a 10-15 fold reduction in wear at low speeds, but only 2-7 fold at greater speeds. The higher resistance to shear of VK8 and T5K10 carbides, compared to T15K6 produces a less marked effect of coolant on their wear. This is followed by a report on turning of EI481 steel by tools with T15K6 and T5K10 tips and using coolant. From the results, equations for the life period of tool with or without coolant were deduced. They reveal that pressure coolant increases the life of tool by 4.5 times. The equations indicate

Card 2/3

Investigating the wear ...

S/145/61/000/007/008/009
D221/D301

the advantage due to the coolant as far as the machining time is concerned. The wear in the case of 50% emulsion cooling was also investigated, and it demonstrated a drop in the resistance due to formation of a stable oil film. This effect is impossible to realize during machining, owing to chip formation and to the high contact pressure. There are 6 figures and 2 tables.

ASSOCIATION: Ural'skiy politekhnicheskii institut (Ural Polytechnic Institute)

SUBMITTED: March 15, 1961

Card 3/3

S/123/62/000/003/016/018
A004/A101

AUTHORS: Shabashov, S. P., Kuklin, L. G.

TITLE: The efficiency of new cooling methods in metal cutting

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1962, 67, abstract 3B387 ("Tr. Ural'skogo politekhn. in-ta", 1961, v. 112, 81-88)

TEXT: The authors analyze the effect of new cooling methods on the tool life, surface roughness and microhardness of the surface layer of the part being machined. During the investigations, cooling was effected by an atomized jet by feeding compressed air at a pressure of 4 - 5 atm and by the jet-pressure method at a pressure of 15 - 20 atm. The authors investigated the wear of the sintered carbide grades BK8 (VK8), T5K10 and T15K6 during the machining of the steel grades 38XPH (38KhGN), 3H481 (EI481) and Г13Л (G13L). The temperature of the tool back surface was measured with a semi-artificial constantan - tool sintered carbide thermocouple. The H-10 (N-10) four-loop magnetoelectric oscillograph was used as recording device. It was found that using the new cooling methods, the tool life increased on the average by a factor of 2.5 - 3.5, which made it possible to increase the cutting speed by a factor of 1.5. The maximum effect

Card 1/2

The efficiency of new cooling methods ...

S/123/62/000/003/016/018
A004/A101

was obtained during the cutting with the VK8 sintered carbide. Jet-pressure cooling is the most efficient, but it requires a dependable protection from spattering. Cooling by an atomized jet can be used in all operations of mechanical working. As cutting fluid the authors recommend an aqueous emulsion containing 10% emulsol and 2% sulfofrezol. The surface layer quality of the part being machined is improved as a result of strengthening and the creation of residual stresses. There are 7 figures and 1 table,

L. Bozin

[Abstracter's note: Complete translation]

Card 2/2

ANIKIN, Nikolay Aleksandrovich; DROBYSHEVSKAYA, Nadezhda Ivanovna;
 DUDINOV, Vladimir Alekseyevich; KON'KOV, Arkadiy
 Sergeyevich; KONYUKHOV, Sergey Mikhaylovich; MESHCHERINOV,
 Fedor Ivanovich; POLETSKIY, Aleksandr Timofeyevich; POLYAKOV,
 Gleb Maksimovich; SAL'NIKOV, Oleg Alekseyevich; CHERNOBAY,
 Dmitriy Gavrilovich; GAVRILOV, P.G., kand. tekhn.nauk, retsen-
 zent; NEFED'YEV, G.N., kand. fiz.-mat. nauk; SOKOLOV, V.M.,
 kand. fiz.-mat. nauk; SOKOLOVSKIY, V.I., kand. tekhn. nauk;
 RUDIN, S.N., inzh.; EYDINOV, M.S., kand. tekhn. nauk; DUBITSKIY,
 G.M., doktor tekhn. nauk, red.; ZAKHAROV, B.P., inzh., red.;
 KONOVALOV, V.N., kand. tekhn. nauk, red.; PERETS, V.B., kand.
 tekhn. nauk, red.; ROZENBERG, I.A., kand. ekonom. nauk, red.;
 STEPANOV, V.V., kand. tekhn. nauk, red.; SUSTAVOV, M.I., inzh.,
 red.; SHABASHOV, S.P., kand. tekhn. nauk, red.; DUGINA, N.A.,
 tekhn. red.

[Handbook for inventors and innovators] Spravochnik dlia izobre-
 tatelia i ratsionalizatora . [By] N.A.Anikin i dr. Izd.3., ispr.
 1 dop. Moskva, Mashgiz, 1962. 791 p. (MIRA 16:1)
 (Technological innovations—Mechanical engineering)

SHABASHOV, S.P.

AID Nr. 975-1 23 May

THERMOMECHANICAL TREATMENT OF HIGH-SPEED STEELS (USSR)

Shteynberg, M. M., L. B. Sabun, S. P. Shabashov, and M. A. Smirnov.
~~Metallovedeniye i termicheskaya obrabotka metallov~~, no. 4, Apr 1963, 41-48.
 S/129/63/000/004/010/014

The effect of low- and high-temperature thermomechanical treatment (LTTT and HTTT, respectively) on the cutting properties and ductility of P9 (0.87% C, 9.0% W, 4% Cr, 2.10% V, 0.20% Mo), P905 (1.54% C, 10.15% W, 3.64% Cr, 4.86% V, 0.20% Mo), and P10K505 (1.46% C, 11.26% W, 4.44% Cr, 4.95% V, 0.19% Mo, 6.0% Co) high-speed steels has been studied at the Ural Polytechnic Institute and the Ural Heavy Machinery Plant. It was determined that LTTT (ausforming) enhances the tool life of P9 steel but has little effect on the tool life of the other two steels. The effect of LTTT on P9 steel was greatest at a temperature of 400°C with a 15% reduction. Under these conditions the wear resistance of the treated cutting tools was more than doubled. HTTT carried out at 900°C with a 15% reduction had less

Card 1/2

AID Nr. 975-1 23 May

TERMOMECHANICAL TREATMENT [Cont'd]

S/129/63/000/004/010/014

effect on the P9 steel and was even detrimental to the other two steels. Although both LTTT and HTTT improved the ductility of all three steels, the HTTT cannot be recommended for the P905 and P10K505 steels because it resulted in a considerable decrease in their cutting properties. The amount of residual austenite in hardened P9 steel decreases in LTTT when reduction is less than 5% and increases when reduction is above 5%. In the HTTT of hardened P9 steel the amount of residual austenite decreases as deformation is increased. Neither treatment has a noticeable effect on the austenite content in the other two steels.

[SS]

Card 2/2

S/126/63/015/003/023/025
E073/E335

AUTHORS: Shteynberg, M.M., Sabun, L.B. and Shabashov, S.P.

TITLE: Rapid cooling of high-speed steel during quenching as a method of improving the cutting properties

PERIODICAL: Fizika metallov i metallovedeniye, v. 15, no. 3, 1963, 475 - 477

TEXT: High-temperature thermomechanical treatment of steel P9 (R9) (C 0.9%, Cr 4.2%, W 9.1%, V 2.3%) improves considerably the toughness and the cutting properties to some extent. However, stepwise heat treatment without plastic deformation (heating to 1260 °C, transfer to a salt bath of 900 °C for 30 sec and oil-quenching) increases the toughness and improves the cutting properties. The authors attribute this influence to the effect of thermal work-hardening of the austenite. To study this effect further, experiments were carried out on determining the optimum temperatures of cooling and holding for 13 x 13 mm cross-section blanks of steel R9. All the specimens were austenitized at 1260 °C, cooled in a salt bath to 950, 900, 850, 830 and 800 °C, respectively, for durations of 0.25 - 3 min, oil-quenched and tempered

Card 1/3

Rapid cooling

S/126/63/015/003/023/025
E073/E335

twice for 1 h at 560 °C. The specimens were then used for making cutting tools and their cutting performance was compared with a tool made of the same steel but subjected to standard oil-quenching without the above mentioned intermediate cooling. Specimens cooled to 830 °C and held at that temperature for 30 sec had the longest service life, up to 320% higher than that of the reference specimens which would permit increasing the cutting speed by 15 - 20%. Higher or lower intermediate cooling temperatures also improved the cutting properties but to a lesser extent. Intermediate cooling to temperatures above 900 °C or for durations in excess of 1 min lowered the service life. Obviously, for other cross-sections the optimum value would be different. The authors recommend that this heat-treatment technology be introduced into industry. They also recommend further investigation to elucidate whether the appreciable change in the properties as a result of the fast intermediate cooling is due to thermal work-hardening as the authors believe, or whether other factors (polygonization, ageing, etc.) play an important role. The method may also permit

Card 2/3

Rapid cooling

S/126/63/015/003/023/025
E073/E335

improving the properties of constructional and austenitic steels.
There is 1 table.

ASSOCIATIONS:

Ural'skiy politekhnicheskii institut im.
S.M. Kirova (Ural Polytechnical Institute im.
S.M. Kirov)
Ural'skiy zavod tyazhelogo mashinostroyeniya
im. S. Ordzhonikidze (Ural Heavy Engineering
Works im. S. Ordzhonikidze)

SUBMITTED:

October 19, 1962

Card 3/3

SHABASHOV, S.P., kand.tekhn.nauk

Investigating the wear resistance of experimental and standard
brands of hard alloys subjected to grinding. Izv.vys.ucheb.zav.;
mashinostr. no.6:208-216 '63. (MIRA 16:10)

1. Ural'skiy politekhnicheskiy institut.

ZUSMAN, A.D.; SHABASHOV, S.P., kand. tekhn.nauk, retsenzent;
BASKAKOV, G.V., kand. tekhn. nauk, red.; SMIRNOV, G.V.,
tekhn. red.

[Machining holes on drilling machines] Obrabotka otverstii
na sverlil'nykh stankakh. Moskva, Mashgiz, 1963. 129 p.
(MIRA 17:3)

ROZENBERG, A.M., doktor tekhn. nauk, prof., red.; SHABASHOV, S.P.,
kand. tekhn. nauk, retsenzent; BELEN'KIY, E.A., red.

[Metal cutting and metal-cutting tools] Rezanie metallov
i instrument. Pod red. A.M. Rozenberga. Moskva, Mashino-
stroenie, 1964. 226 p. (MIRA 17:10)

1. Tomsk. Politekhnikheskiy institut imeni Kirova.

SHABASHOV, S.P., kand.tekhn.nauk, dotsent; TURETSKIY, Ya.Sh., inzh.

Selecting a grinding wheel for rough grinding of the 30Kh10G10 steel.
Vest.mashinostr. 45 no.9:69-71 S '65.

(MIRA 18:10)

ACC NR: AR6035433

SOURCE CODE: UR/0276/66/000/008/1097/1098

AUTHOR: Shabashov, S. P.; Tesler, S. L.

TITLE: Investigation of the process of turning 30Kh10G10 cast steel in a lathe with heating of the cutting zone

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 8B614

REF SOURCE: Sb. Materialy III Nauchno-tekhn. konferentsii instrumental'shchikov Zap. Urala, 1965. Ch. 1. Perm', 1965, 48-54

TOPIC TAGS: cast steel, high speed metal cutting, metal turning, electric metal finishing

ABSTRACT: Results are presented of an investigation of the possibility of increasing the endurance of the cutters when 30Kh10G10 cast steel is turned, by contact heating of the cutting zone and determining the optimal parameters (cutting speed, feed, current) at which the heating effect is the maximum. The cutting zone is heated by the contact method. Experiments have yielded plots of $T = f(v)$ and of the cutting temperature against v , from which it is established that the character of the curves remained the same when cutting is accompanied by heating as in ordinary cutting. However, the speeds at which maximum endurance is attained increase; the endurance is also increased at the same time. Within definite limits of variation of v and S , the effect of heating decreases with increasing v and increases with increasing S . Heating the cutting zone makes it possible to increase appreciably the endurance of the cutting tool and

Card 1/2

UDC: 621.941.1

ACC NR: AR6035433

the area of the work surface during the tool lifetime. The heating effect reaches 900%. 4 illustrations. L. Tikhonova [Translation of abstract]

SUB CODE: 13, 11

Card 2/2

ACC NR: AP7002607

(A, N)

SOURCE CODE: UR/0413/66/000/023/0115/0116

INVENTORS: Gunbin, B. L.; Shabashov, S. Z.

ORG: none

TITLE: An automatic device for disconnecting a damaged gas pipe. Class 47, No. 189271

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 115-116

TOPIC TAGS: gas engineering, gas conduction, gas flow

ABSTRACT: This Author Certificate presents an automatic device for disconnecting a damaged gas pipe. The device includes a distributing assembly (which activates the drive mechanism of the shut-off organ) and a gauge which controls the change of gas flow in a gas pipe when the latter is damaged (see Fig. 1). To prevent the automatic device from being activated by the changing operational conditions and to activate it when the velocity head exceeds the allowable limit, the gauge (fixed to the automatic device and made in the form of a cylinder) is oriented at right angles to the longitudinal axis of the gas stream. The lateral walls of the cylinder contain four openings. Two of these are placed centrally in respect to the stream during its forward and backward flow. The other two are placed at some angle to the central ones. These openings are connected by pipes (located within the casing of the gauge) to the rigid elements of the distributing assembly which motivates the drive mechanism

UDC: 621.646.83-522

Card 1/2

ACC NR: AP7002607

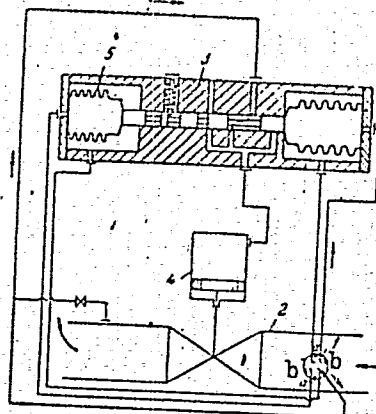


Fig. 1. 1 - gauge; 2 - gas pipe; 3 - distributing assembly; 4 - drive mechanism for the shut-off organ of gas pipe; 5 - rigid elements (a, a', b, b' are the openings in the cylindrical walls of the gauge)

activating the shut-off organ of the pipe. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 03Aug61

Card 2/2

04452

S/112/59/000/014/014/085

A052/A001

26.2121

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 14, p. 32,
28753

AUTHORS: Semichev, V. G., Chernyak, Kh. T., Golovin, Yu. D., Shabashov, S.Z.,
Kruglov, G. P.

TITLE: Gas-Turbine Unit GT-700-4 With Centrifugal Supercharger 280-11-2

PERIODICAL: Tr. Nevsk. mashinostroit. z-da, 1957 (1958), No. 1, pp. 69-91

TEXT: The main features of centrifugal superchargers with a gas-turbine drive for pumping stations of the main gas pipelines are: a variable number of revolutions permitting the maintenance of a high efficiency at considerable deviations of the load from the rated level; the utilization of gaseous fuel; starting by means of the turbine compressed-gas driven engine. The gas turbine of 4.8 atm and 700°C has 2 cylinders and a composite rotor. The disks of the initial stages are air-cooled (up to 1.5% air). The central (flow) part of the turbine consists of 6 stages, the first three having a low degree of reaction and the last with a 50% reaction. According to the experimental data the

Card 1/2

811182
S/112/59/000/014/014/085
A052/A001

Gas-Turbine Unit GT-700-4 With Centrifugal Supercharger 280-11-2

efficiency of the turbine must be not lower than 87%. A 17-step compressor is assembled of profiles with a 100% reaction and with a relatively low coefficient of discharge. The combustion chamber has been designed on the basis of investigations carried out on models in the Kiyev Polytechnic Institute. Its thermal intensity is $6.5 \cdot 10^6$ kcal/m³ hour. A high degree of heat regeneration (75%) is secured by a small-size plate air heater. A hydrodynamic control system maintains a constant pressure of the delivered gas. Control, protection and inspection systems permit the remote start and stop of the installation by means of a program time relay.

V. S. P.

Translator's note: This is the full translation of the original Russian abstract.

44

Card 2/2

L 59650-65 EWT(d)/EPA/EWP(f)/EPF(n)-2/EPR/T-2/EPA(bb)-2/EWP(1) Po-4/Paa-4/
Pq-4/Pg-4/Ps-4/Pk-4/Pl-4 IJP(c) WW/BQ
ACCESSION N^o: AP5001127

3/0286/64/000/022/0076/0076 48

AUTHORS: Borodkin, V. L.; Sarantsev, K. B.; Shabashov, S. Z.

TITLE: Remote starting device for gas turbines. Class 46, No. 166556

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1964, 78

TOPIC TAGS: gas turbine control, turbine starting, remote control, remote control system, servomechanism

ABSTRACT: This Author Certificate introduces a gas turbine starting device as described in Author Certificate No. 149280 (see Fig. 1 on the Enclosure). To close automatically the working fluid inlet valve and to decouple the turbine expansion engine from the turbine shaft, a speed regulator is installed in the hydraulic supply line to the valve servoactuator. This speed regulator connects the line to the drain when the turbine reaches operating speed, while the servomotor of the valve is equipped with a terminal shut-off which is connected to the electromagnetic circuit of the slide valve. To provide a warning for the turbine expansion engine disconnect, an alternate version has a slider valve connected in the hydraulic supply line to the clutch servoactuator. This slider valve is mechanically

Card 1/3

L 59650-65

ACCESSION NR: AP5001127

connected to the valve rod and only actuates the supply line after the valve is closed. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 21Nov63

SUB CODE: FA

NO REF SOV: 000

ENCL: 01

OTHER: 000

2/3

L 59650-65
ACCESSION NR: AP5001127

ENCLOSURE: 01

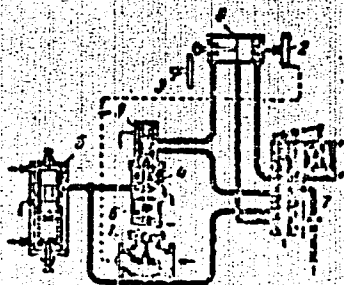


Fig. 1.

1- working fluid inlet valve; 2- turbine expansion engine; 3- turbine shaft; 4- supply valve servo-motor; 5- speed regulator; 6- terminal shut-off; 7- electromagnetic spool valve; 8- servoactuator; 9- slider valve.

3/3 ADP

KUZNETSOV, L.A., doktor tekhn. nauk; ANDREYEV, V.I.;
BOGORADOVSKIY, G.I.; BURDIN, A.A.; KRINSKIY, A.A.;
FAYNSHTEYN, A.A.; SHABASHOV, S.Z.

[The GT-700-5 gas turbine system] Gazoturbinnaya ustanovka
GT-700-5. Moskva, Mashinostroenie, 1964. 190 p.
(MIRA 17:5)

SHARASHOV, T.K., (Noginsk).

Conception of irrational numbers in a course for the 8th grade. Mat.v
shkole no.3:62-69 My-Je '53. (MLRA 6:6)

(Numbers, Irrational)

SHABASHOV, T.K. (Noginsk).

Incommensurable line segments. Mat. v shkole no.3:14-18 My-Je '57.
(Geometry, Plane--Study and teaching) (MLBA 10:6)

POTOTSKIY, Mikhail Vladimirovich; MARGULIS, A.Ya., dots., retsenzent;
SHOLASTER, N.N., dots., retsenzent; MAKAROV, I.P., dots.,
retsenzent; SHABASHOV, T.K., retsenzent (Noginsk); NIKITINA,
N.I., red.

[What is being studied in a mathematical analysis course]
Chto izuchaetsia v kurse matematicheskogo analiza. Moskva,
Prosveshchenie, 1965. 86 p. (MIRA 18:8)

SHABASHOV, V., delegat XIII s"yezda professional'nykh soyuzov
(Shabashov); IVANNIKOV, G.

At the sources of the plan. Sov. profsoiuzy 19 no. 19:12-13
0 '63. (MIRA 16:11)

1. Zamestitel' predsedatelya zavodskogo komiteta
Mytishchinskogo mashinostroitel'nogo zavoda, Moskovskaya
obl. (for Ivannikov).

ACC NR: AP7005687

SOURCE CODE: UR/0413/67/000/002/0159/0159

INVENTOR: Shabashov, V. I.; Viktorov, N. V.; Deliyev, K. N.; Kuznetsov, L. S.

ORG: None

TITLE: A catch for uncoupling the free ends of a parachute. Class 62, No. 190797

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 159

TOPIC TAGS: parachute, auxiliary aircraft equipment, mechanical fastener

ABSTRACT: This Author's Certificate introduces a catch for uncoupling the free ends of a parachute. The device includes a frame, a cover with spring-loaded flanges, a safety lock which holds a spring-loaded lug and a clasp for fastening the free ends of the parachute. To reduce opening stresses and improve the operational reliability of the catch under a load of up to 400 kg, the clasp with the locking lug is operated by a rotating lever hinged to the cover.

Card 1/2

UDC: 629.13.01/06

SUB CODE: 01/ SUBM DATE: 10Nov65

Card 2/2

SHABASHOV, V.M.

27.4000 4112.3212 25935

S/141/61/004/001/015/022
E033/E435

AUTHORS: Tsatlin, M.L., Gorokhov, Yu.S., Matusova, A.P.,
Mel'nikova, V.A., Tarantovich, T.M. and Shabashov, V.M.

TITLE: An apparatus for registering and diagnosing disorders
of the rhythmic function of the heart

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika,
1961, Vol.4, No.1, pp.165-172

TEXT: A description is given of an apparatus for the automatic recording and diagnosis of disorders of the rhythmic function of the heart. The apparatus is a logical device utilizing electronic digital computer elements. The initial data for the apparatus are the lengths of the time intervals between the electrocardiogram peaks (R) indicating the depolarization of the ventricles. The length of these intervals is compared with the mean (normal) length averaged over t seconds. As a result of the comparison, each interval is assigned one of three letters: "S" (short), "L" (long), "N" (normal). The changeover occurs at $\pm 25\%$ of the normal interval length. The letters are then assembled into "words". The "words" corresponding to this or that rhythmic disorder (heart block, extra-systoles with, and

Card 1/2

25555
An apparatus for registering ...

S/141/61/004/001/015/022
E033/E435

without, compensatory pauses, extra-systoles followed by block, paroxysmal tachycardia) are combined in "diagnoses" recorded automatically by the apparatus. The disorders of the rhythmic function of the heart thus detected may serve for the purposes of diagnosing and studying the influence on the patient's organism of various chemical and physical factors. The block schematic of the apparatus is given and the modus operandi described. The apparatus consists of: 1) the transducer of the bipotentials of the heart muscle; 2) the amplifier; 3) the shaper; 4) the "trigger ring"; 5) the pulse tachometer; 6) two reference pulse generators with electronic pulse length control; 7) the memory; 8) the decoder and 9) the registering apparatus. There are 7 figures and 9 references: 6 Soviet-bloc and 3 non-Soviet-bloc. The reference to an English language publication reads as follows: Electronic Engineering, 31, 268 (1959).

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom universitete (The Scientific-Research Physicotechnical Institute, Gorkiy University)

SUBMITTED: September 6, 1960
Card 2/2

SHABASHOV, Ya.F.; NESTERENKO, N.T.

Producing pressed and drawn copper goods possessing high
electric conductivity. TSvet.met. 28 no.5:55-62 S-0 '55.
(MIRA 10:10)

(Copper)

SHABASHOV, YA F.

137-58-4-6990

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 98 (USSR)

AUTHORS: Postnikov, N. N. Shabashov, Ya. F.

TITLE: Development of the Production of Rolled Non-ferrous Metals and Alloys at the Krasnyy Vybörzhets Plant (Razvitiye proizvodstva prokata tsvetnykh metallov i splavov na zavode "Krasnyy vybörzhets")

PERIODICAL: V sb.: Metallurgiya. Moscow-Leningrad, AN SSSR, 1957, pp 146-153

ABSTRACT: The history of the development of this plant, which was founded in 1857, is presented. At the end of the first world war, the factory for its day was large for the metals industries and possessed reverberatory furnaces for smelting Cu, a shop for crucible smelting of brass, rolling mills, and a medium-size Mannesmann tube mill. After the revolution, crucible smelting was replaced by electrical smelting, and an extrusion shop was built. In addition to products of Cu and brass, the smelting of bronze was developed. Currently, the plant manufactures products for the shipbuilding, automobile and tractor, radio-engineering, and other industries. In post-war years, a number of major under-

Card 1/2

137-58-4-6990

Development of the Production of Rolled Non-ferrous Metals (cont.)

takings were carried out at the mill for the purpose of introducing modern processes and technologies, and for improving economic and technical performance.

Yu. F.

1. Metals--Development--USSR 2. Metal alloys--Development--USSR

Card 2/2

136-8-2/21

AUTHOR: Shabashov, Ya.F.

TITLE: Development of Electric Melting at the "Krasnyy Vyborzhets" Works (Razvitiye elektropлавki na zavode "Krasnyy Vyborzhets")

PERIODICAL: Tsvetnye Metally, 1957, Nr 8, pp.11-15 (USSR)

ABSTRACT: After describing crucible-hearth methods of melting copper base alloys the author discusses the considerations which led to the adoption of induction melting at the works in 1926-27. The original installation had 300 kg furnaces, but in 1930 the capacity of some was increased to 600 kg, but early attempts at extension of electric melting to copper alloys other than brasses failed. The author describes the successful solution of two difficult problems through special efforts of the works staff (named). He outlines extensions and reconstructions and mentions works personnel who have played an important role in this. On future developments he mentions a plan produced in 1956 for reconstruction, including the installation of 5 ton furnaces, mechanization of charging, casting of all ingots by a

Card 1/2

136-8-2/21

Development of Electric Melting at the "Krasnyy Vyborzhets" Works.
semi-continuous method and mechanization of the ingot treatment line. A photograph of the author, who is Chief Metallurgist at the works, is given.

ASSOCIATION: "Krasnyy Vyborzhets" Works (Zavod "Krasnyy Vyborzhets")

AVAILABLE: Library of Congress.

Card 2/2

S/131/62/000/005/001/004
B105/B138

AUTHORS: Aleksandrova, T. A., Prokhorova, I. Ya., Galushko, N. A.,
Shabashov, Ya. F., Frumkina, Yu. A.

TITLE: Carborundum-graphite crucibles for the melting of copper-
base alloys

PERIODICAL: Ogneupory, no. 5, 1962, 208-211

TEXT: A production process for crucibles suitable for producing copper-chromium master alloys and chromium bronze in the high-frequency furnace OKF-281 (OKB-281) has been developed at the Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractory Materials). 500 kg crucibles were produced by hydrostatic pressing in the Luzhskiy zavod "Krasnyy tigel" (Luga Plant "Krasnyy tigel"). The charge consisted of carborundum, crucible graphite, elementary silicon, and Chasov-Yar clay, with sulfite-alcohol waste liquor, density 1.27 g/cc., as binder. During the burning, β -SiC is formed from the elementary silicon and graphite: $\text{Si} + \text{C} \rightarrow \beta\text{-SiC}$. Si_{el} and SiC were determined in the analytical chemistry laboratory of the VIO by K. K. Kolobova's method. After burning the
Card 1/3

Carborundum-graphite crucibles for ... S/131/62/000/005/001/004
B105/B138

crucibles showed the following properties: apparent porosity 19.8%, compressive strength 145 kg/cm^2 , electrical volume resistivity $0.0044 \text{ ohm} \cdot \text{mm}^2/\text{m}$, permeability to gas $0.02 \text{ l.m/m}^2 \cdot \text{hr} \cdot \text{mm}$ water column, depth of cavity in a sandblast wearability test 4.9 mm, coefficient of thermal conductivity at 800°C $\lambda = 8.5 \text{ kcal/m} \cdot \text{hr} \cdot \text{degree}$. Microscopic examination showed that the crucibles contained no metal after use in the OKB-281 furnace. 500 kg carborundum-graphite crucibles have a life of 35-40 copper-chromium melts, and up to 75 for the BK-08 (BKb-08) bronze. Because of the low resistivity of the crucibles, the furnace could be finely adjusted, the metal melted more rapidly and, besides this, the electro corundum crucible bedding was well fritted. These crucibles are suitable for the producing copper-base alloys with a permissible silicon content of up to 0.02 - 0.03%. There are 2 figures and 5 tables.

Card 2/3

Carborundum-graphite crucibles for ...

S/131/62/000/005/001/004
B105/B138

ASSOCIATION: Vsesoyuznyy institut огнеупоров (All-Union Institute of Refractory Materials) (Aleksandrova, T. A., Prokhorova, I. Ya.); Zavod "Krasnyy Tigel'" (Plant "Krasnyy Tigel'") (Galushko, N. A.); Zavod "Krasnyy Vyborzhets" (Plant "Krasnyy Vyborzhets") (Shabashov, Ya. F., Frumkina, Yu. A.).

Card 3/3

SHABASHOV, Ya.F.; LEBEDEV, K.P.

Increasing the technical and economic indices of the melting
process of loose and briquetted chips in electric furnaces.
TSvet. met. 36 no.4:84-87 Ap '63. (MIRA 16:4)

(Nonferrous metals—Metallurgy)
(Scrap metals)

ACC NR: AP6030608 (A, N) SOURCE CODE: UR/0413/66/000/016/0095/0095

INVENTOR: Bobylev, A. V.; Mironov, S. S.; Nikolayev, A. K.; Strakhov, G. N.; Shabashov, Ya. F.; Sergeyev, L. N.; Goryunov, I. I.

ORG: none

TITLE: Copper-base alloy. Class 40, No. 185068 [announced by the State Scientific-Research and Design Institute for Alloys and Processing of Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 95

TOPIC TAGS: copper chromium alloy, zirconium containing alloy, vanadium containing alloy, CHROMIUM CONTAINING ALLOY, COPPER BASE ALLOY, ALLOY COMPOSITION

ABSTRACT: This Author Certificate introduces a copper-base alloy containing chromium and zirconium. To improve the alloy physical and mechanical properties, its chemical composition is set as follows: 0.2—1% chromium, 0.1—0.8% zirconium, and 0.01—1.0% vanadium. [ND]

SUB CODE: 11/ SUBM DATE: 10Feb65/ ATD PRESS: 5076

Card 1/1

UDC: 669.35'26' '292'296

DERGACHEV, A.F.; TROITSKIY, Kh.L.; SHABASHOV, Ya.I., inzh., red.

[Economics of construction and road machinery manufacturing] Ekonomika stroitel'nogo i dorozhnogo mashinostroeniia.
Moskva, Mashinostroenie, 1964. 336 p. (MIRA 17:12)

SHABASHOVA, A.S., kand.hiol.nauk

Evening promenade. Zdorov'e 5 no.11:25 N '59.

(MIRA 13:3)

(INSOMNIA)

6

eA

Interaction between sulfur dioxide and copper sulfate solutions. Ya. M. Pesin and M. L. Shabashova (Leningrad Technol. Inst.). *Zhur. Priklad. Khim.* (J. Applied

Chem.) 23, 278-84(1950).—The solid ppt. formed by the action of 100% SO_2 gas, flowing at a rate of 1.5 l./hr., on a 10% soln. of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$, at 60° and at 80° , was identified (by analysis, crystallography, and x-ray diffraction) as Chevrel's salt $\text{CuSO}_4 \cdot \text{Cu}_2\text{SO}_4 \cdot 2\text{H}_2\text{O}$ (I). Consequently, the reaction equation at 60 and 80° is $3 \text{CuSO}_4 + 3 \text{H}_2\text{SO}_4 + 3 \text{H}_2\text{O} = \text{I} + 4 \text{H}_2\text{SO}_4$. At 100° , the solid is entirely metallic Cu, in conformity with the reaction $\text{CuSO}_4 + \text{H}_2\text{SO}_4 + \text{H}_2\text{O} = \text{Cu} + 2 \text{H}_2\text{SO}_4$. Decompn. of I (2 g. in 300–400 ml. H_2O) on boiling, under a stream of CO_2 , proceeded according to $3 \text{I} = 5 \text{SO}_2 + \text{CuSO}_4 + 4 \text{Cu}_2\text{O}$. N. Thon

CA

6

The interreaction between sulfur dioxide and copper sulfate solutions. Ya. M. Pezin and M. L. Shabashova (Leningrad Inst. Technol.). *J. Applied Chem. U.S.S.R.* 23, 289-95(1950) (Engl. translation).—See *C.A.* 45, 2806i. R. M. S.

1951